

## 101.13 - Cast Irons (chip form)

Technical Contact: [john.sieber@nist.gov](mailto:john.sieber@nist.gov)

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	4I	5m	6g	82b	107c	115a	122i
Description	Cast Iron	Cast Iron	Cast Iron	Cast Iron (Ni-Cr)	Cast Iron (Ni-Cr-Mo)	Cast Iron (Cu-Ni-Cr)	Cast Iron
Unit of Issue	(150 g)	(150 g)	(150 g)	(150 g)	(150 g)	(150 g)	(150 g)
<b>C Total</b>	3.21	2.59	2.85	2.85	2.99	2.62	3.47
<b>C Graphite</b>	2.66		2.01	2.37	1.98	1.96	
<b>Mn</b>	0.825	0.74	1.05	0.745	0.480	1.00	0.530
<b>P</b>	0.149	0.32	0.557	0.025	0.079	0.086	0.28
<b>S Comb</b>	0.043	0.133	0.124	0.007	0.059	0.065	0.087
<b>Si</b>	1.33	1.83	1.05	2.10	1.21	2.13	0.89
<b>Cu</b>	0.240	0.89	0.502	0.038	0.205	5.52	0.033
<b>Ni</b>	0.042	0.041	0.135	1.22	2.20	14.49	0.047
<b>Cr</b>	0.118	0.080	0.370	0.333	0.693	1.98	0.151
<b>V</b>	0.024	0.033	0.056	0.027	0.015	0.014	0.012
<b>Mo</b>	0.040	0.029	0.035	0.002	0.83	0.050	0.008
<b>Co</b>	Zn (						
<b>Ti</b>	(0.03)	0.097	0.059	0.027	0.019	0.020	0.024

SRM	4I	5m	6g	82b	107c	115a	122i
Description	Cast Iron	Cast Iron	Cast Iron	Cast Iron (Ni-Cr)	Cast Iron (Ni-Cr-Mo)	Cast Iron (Cu-Ni-Cr)	Cast Iron
Unit of Issue	(150 g)	(150 g)	(150 g)	(150 g)	(150 g)	(150 g)	(150 g)
<b>As</b>	(0.03)		0.042				
<b>Sn</b>	(0.004)						
<b>Al (total)</b>	(0.004)						
<b>Mg</b>	Sb (						
<b>N</b>	(0.0016)	0.006	0.005				
<b>Fe</b>	Pb (0.001)						
<b>S Grav</b>					0.064		

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SRM	334	338	341	342a	890	891	892
Description	Gray Cast Iron (Carbon & Sulfur)	White Cast Iron (Carbon & Sulfur)	Ductile Cast Iron	Nodular Cast Iron	Cast Iron, HC250+V	Cast Iron, Ni-Hard, Type I	Cast Iron, Ni-Hard, Type IV
Unit of Issue	(150 g)	(150 g)	(150 g)	(150 g)	(150 g)	(150 g)	(150 g)
<b>C Total</b>	2.83	3.33	1.81	1.86	2.91	2.71	3.33
<b>C Graphite</b>			1.23	1.38			
<b>Mn</b>			0.92	0.274	0.62	0.55	0.76
<b>P</b>			0.024	0.019	0.025	0.038	0.054
<b>S Comb</b>	0.043	0.015	0.007	0.006	0.015	0.029	0.015
<b>Si</b>			2.44	2.73	0.67	0.56	1.83
<b>Cu</b>			0.152	0.135	0.055	0.150	0.270
<b>Ni</b>			20.32	0.058	0.397	4.48	5.53
<b>Cr</b>			1.98	0.034	32.4	2.23	10.18
<b>V</b>			0.012		0.45	0.039	0.041
<b>Mo</b>			0.010	0.006	0.018	0.27	0.20
<b>Co</b>					(0.03)	0.19	0.31
<b>Ti</b>			0.018	0.020		(0.01)	(0.02)

SRM	334	338	341	342a	890	891	892
Description	Gray Cast Iron (Carbon & Sulfur)	White Cast Iron (Carbon & Sulfur)	Ductile Cast Iron	Nodular Cast Iron	Cast Iron, HC250+V	Cast Iron, Ni-Hard, Type I	Cast Iron, Ni-Hard, Type IV
Unit of Issue	(150 g)	(150 g)	(150 g)	(150 g)	(150 g)	(150 g)	(150 g)
<b>As</b>					(0.008)	(0.004)	(0.006)
<b>Sn</b>						(	(0.02)
<b>Al (total)</b>					(	(0.008)	(0.009)
<b>Mg</b>		0.068	0.070				
<b>N</b>					(0.089)	(0.012)	(0.019)
<b>Fe</b>					(61.8)	(88.5)	(77.4)
<b>S Grav</b>		0.007					

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